

## **Weekly Report**

### **08/07/2019 – 14/07/2019**

A paper I read last week is "Timelines Revisited: A Design Space and Considerations for Expressive Storytelling [1]". Aim of this paper is presenting a design space for storytelling with timelines. I found the 14 design choices that categorized by three dimensions. The three dimensions are the representation, scale, and layout.

Another paper about design space, it is "A Design Space of Visualization Tasks [2]". This paper provides five design dimensions, e.g., goal, means, characteristics, target, and cardinality. Moreover, they mentioned their design space for different user roles, such as developers, authors, and end users. The benefit of these two papers, I think it helps me to scope the design space for data video.

A paper mentioned the five movie dimensions (e.g., motion, editing, framing, sound, and brightness) and four acts (I would say it has six acts, e.g., prolog, setup, complication, development, climax, and epilog). This paper support the movie narratives have roughly the same structure as narratives in any other domain. Moreover, this paper shows an example of the distributions of value on five movie dimensions for six parts of movies. It surprised me that for each part of movies, there is a pattern to explain each scene in the movies.

VisJockey [4] is like a StorylineJS [5] and TimelineJS [6]; they are quite the same purpose that enables readers to access the authors' intended view easily. However, I think StorylineJS and TimelineJS give the more natural way to let the user create their storytelling with the graph and some events behind the data.

[1] Brehmer, M., Lee, B., Bach, B., Riche, N. H., & Munzner, T. (2017). Timelines Revisited: A Design Space and Considerations for Expressive Storytelling. *IEEE Transactions on Visualization and Computer Graphics*, 23(9), 2151–2164. <https://doi.org/10.1109/TVCG.2016.2614803>

[2] Nocke, T., Heitzler, M., & Schumann, H. (2013). A Design Space of Visualization Tasks, 19(12), 2366–2375.

[3] Cutting, J. E. (2016). Narrative theory and the dynamics of popular movies. *Psychonomic Bulletin and Review*, 23(6), 1713–1743. <https://doi.org/10.3758/s13423-016-1051-4>

[4] Kwon, B., Stoffel, F., Jäckle, D., & Lee, B. (2014). VisJockey: Enriching Data Stories through Orchestrated Interactive Visualization. *Computation+*. Retrieved from <http://kops.uni-konstanz.de/handle/123456789/30212>

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[5] <http://storyline.knightlab.com/>

[6] <http://timeline.knightlab.com/>